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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/762,922	02/14/2001	Kari Einamo	PM 277084	1058

909 7590 05/07/2007

PILLSBURY WINTHROP SHAW PITTMAN, LLP
P.O. BOX 10500
MCLEAN, VA 22102

EXAMINER	
CHO, UN C	

ART UNIT	PAPER NUMBER
2617	

MAIL DATE	DELIVERY MODE
05/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/762,922	EINAMO, KARI	
	Examiner	Art Unit	
	Un C. Cho	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 February 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/20/2007 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1 – 5, 7 – 8, 10 – 11, 13 – 14 and 16 – 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. (US 6,009,321) in view of Kalmanek, Jr. et al. (US 7,151,772 B1).

Regarding claim 1, Wang discloses transmitting and receiving signaling messages in a functional entity for subscriber mobility management in a mobile communication system (subscriber mobility management; Wang: Col. 3, lines 5 – 29).

However, Wang as applied above does not specifically disclose receiving a trace command in said functional entity, the command identifying at least one subscriber whose signaling messages are to be traced and indicating a tracer to which information obtained during tracing is sent; starting tracing in the functional entity, which tracing comprises sending to the tracer a copy of a signaling message related to the subscriber to be traced in response to receiving or transmitting the signaling message of the subscriber. In an analogous art, Kalmanek remedies the deficiencies of Wang by disclosing receiving a trace command in said functional entity (the service provider receives a surveillance request; Kalmanek: Col. 29, lines 48 – 53), the command identifying at least one subscriber whose signaling messages are to be traced (Kalmanek: Col. 29, lines 53 – 55) and indicating a tracer to which information obtained during tracing is sent (Kalmanek: Col. 29, line 56 through Col. 30, line 2); starting tracing in the functional entity, which tracing comprises sending to the tracer a copy of a signaling message related to the subscriber to be traced in response to receiving or transmitting the signaling message of the subscriber (Kalmanek: Col. 30, lines 12 – 54 and Col. 31, lines 4 – 27). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of Kalmanek to the system of Wang in order to provide an efficient electronic surveillance of a call when lawfully authorized.

Regarding claim 2, Wang in view of Kalmanek as applied above discloses wherein the trace command also indicates the type of the signaling message to

be traced (Kalmanek: Col. 29, lines 30 – 40), and the copy of the signaling message is sent only if the signaling message is of the type to be traced (Kalmanek: Col. 30, lines 12 – 54).

Regarding claim 3, Wang in view of Kalmanek as applied above discloses wherein tracing starts from the start message of a dialogue related to the subscriber to be traced (Kalmanek: Col. 29, lines 30 – 40 and Col. 29, line 48 through Col. 30, line 54).

Regarding claim 4, Wang in view of Kalmanek as applied above discloses wherein tracing of the subscriber's signaling message stops in response to the fact that the dialogue which started tracing ends (Kalmanek discloses tracing from the start of the call, thus if it would have been obvious to one of ordinary skill in the art to know that if a call starts it obviously ends as well and the service provider will stop tracing accordingly; Kalmanek: Col. 30, lines 12 – 36).

Regarding claim 5, the claim is interpreted and rejected for the same reason as set forth in claim 4.

Regarding claims 7, 10 and 13, the claims are interpreted and rejected for the same reason as set forth in claim 1.

Regarding claims 8, 11 and 14, the claims are interpreted and rejected for the same reason as set forth in claim 2.

Regarding claim 16, Wang in view of Kalmanek as applied above discloses the network element comprising a processor configured to contain the unit and the application part (Kalmanek: Col. 5, line 47 through Col. 6, line 9

whereas it would have been obvious to one of ordinary skill in the art that Network Edge Devices as described by Kalmanek obviously has a processor and the application part for connecting communication network to access networks).

Regarding claim 17, Wang in view of Kalmanek as applied above discloses wherein the network element is one of a MSC, HLR and VLR (Wang: Col. 3, lines 5 – 20).

4. Claims 6, 9, 12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang in view of Kalmanek as applied to claim 1 above, and further in view of Clarke et al. (US 5,793,752).

Regarding claim 6, Wang in view of Kalmanek as applied above does not specifically disclose wherein the signaling messages of the MAP protocol are traced. In an analogous art, Clarke remedies the deficiencies of Wang in view of Kalmanek by disclosing such limitation in Col. 5, line 25 through Col. 6, line 15 and Col. 11, lines 23 – 29. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of Clarke to the modified system of Wang in view of Kalmanek in order to provide a monitoring system that can provide an accurate feedback to the user just by recognizing a predetermined set of message characteristics, which is sufficient to identify a type of node functionality, and associating the type of functionality identified by said set of characteristics with said particular node.

Regarding claim 9, Wang in view of Kalmanek and further in view of Clarke as applied above discloses wherein the signaling messages to be traced are messages of the MAP protocol (Clarke: Col. 5, line 25 through Col. 6, line 15 and Col. 11, lines 23 – 29), and the network element is arranged to start sending copies of the signaling message related to the subscriber in response to the dialogue of the MAP protocol which starts after the trace command and is related to the subscriber to be traced (signaling among network devices triggers tracing; Kalmanek: Col. 29, line 30 through Col. 30, line 54).

Regarding claims 12 and 15, the claims are interpreted and rejected for the same reason as set forth in claim 9.

Response to Arguments

5. Applicant's arguments with respect to claims 1 – 17 have been considered but are moot in view of the new ground(s) of rejection.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Un C. Cho whose telephone number is (571) 272-7919. The examiner can normally be reached on M ~ F 8:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Un C Cho 4/30/07 uc
Examiner
Art Unit 2617

GEORGE ENG
SUPERVISORY PATENT EXAMINER